

Faculty Profile

Table 1A gives the number of faculty for different categories of faculty within each survey group, Table 1B gives the same information for females only, and Table 1C gives some percentages based on the information in Tables 1A and 1B. The estimated total number of full-time faculty in the mathematics groups (Groups I, II, III, Va, M, and B combined) is 22,463. This is an increase of 328 faculty over last year. Because of the sampling and non-responses issues detailed on page 1317, the estimate of the total number of faculty has an estimated standard error of 383. Definitions of the various departmental groupings along with details on the statistical procedures used in the Annual survey are described on page 1317. The doctoral mathematics departments (Groups I, II, III, and Va) full-time faculty has increased to 8,260 from 8,024, Group M is down 250 faculty members, and Group B is up 342. The total faculty size in the statistics and biostatistics group (Group IV) is up to 1,824 this year from 1,749 last year. For the 2009 survey cycle, eight former masters-level mathematics departments reported new doctoral programs and were therefore shifted from Group M to Group III. This shift accounts for the majority of the increase in faculty in the doctoral departments and the decline in the Group M faculty. The reader should keep the changes in Groups III and M in mind when comparing 2008 figures to 2009 figures.

The number of non-tenure-track doctoral faculty (including postdoctoral positions) for all mathematics departments combined is estimated at 2,538 this year, up 7% from 2,361 last year. The number of nondoctoral full-time faculty has remained relatively stable at 3,969. In Group IV the

number of part-time faculty increased 39% from 143 last year to 199 this year, and the number of non-tenure-track doctoral faculty increased from 386 last year to 396 this year due to the increased number of postdoctoral appointments.

Table 1D gives an eight-year history of tenured/tenure-track, and non-tenure-track doctorate-holding faculty, and all part-time faculty for Groups I, II, III, and Va combined, for Group M, and for Group B. For Groups I, II, III and Va combined, Table 1D shows a slow but steady increase in the number of (doctoral) non-tenure-track faculty and a drop in the number of part-time faculty. For Group M, Table 1D shows a relatively stable count of tenured and tenure-track faculty and declines in the non-tenure-track faculty in recent years. For Group B, it shows substantial growth in the number of tenured and tenure-track faculty and a decline in part-time faculty.

Tables 1F and 1G give more information about two types of faculty: full-time faculty without a doctorate and part-time faculty. The majority of full-time non-doctoral faculty, 3,224 (81%), are found in Groups M and B departments. Table 1G shows the part-time faculty broken down by gender and whether they have a doctoral degree. Comparing Table 1G to last year's table, we see that overall part-time faculty has remained relatively stable among the groups with the exception of Group IV which shows an increase of 39% and 7% in part-time male and female faculty, respectively.

Female Faculty

Table 1B gives a complete breakdown of all categories of female faculty by group. For 2009–2010 the estimated total number of full-time

Table 1A: Total Faculty, Fall 2009

	GROUP									
	I Public	I Private	II	III	Va	I, II, III, & Va	M	B	I, II, III, Va, M, & B	IV
Total full-time faculty <i>(Standard error)¹</i>	1802	1078	2553	2519	308	8260 <i>(38)</i>	4328 <i>(78)</i>	9875 <i>(379)</i>	22463 <i>(383)</i>	1824 <i>(34)</i>
Doctoral full-time faculty	1724	1074	2305	2114	298	7515	3428	7550	18493	1725
Tenured	1093	595	1528	1399	164	4779	2410	5069	12258	911
Untenured, tenure-track	177	87	299	442	50	1055	798	1844	3698	416
Postdoctoral appointments	315	297	276	56	47	991	19	59	1068	122
Other non-tenure-track	139	95	202	218	37	690	202	577	1469	275
Nondoctoral full-time faculty <i>(Standard error)¹</i>	78	4	247	405	10	745 <i>(12)</i>	899 <i>(36)</i>	2325 <i>(192)</i>	3969 <i>(195)</i>	100 <i>(7)</i>
Total part-time faculty <i>(Standard error)</i>	168	25	372	566	23	1154 <i>(19)</i>	1802 <i>(88)</i>	3614 <i>(292)</i>	6570 <i>(299)</i>	199 <i>(16)</i>

¹ See 'Remarks on Statistical Procedures' page 1317.

Table 1B: Female Faculty, Fall 2009

	GROUP									
	I Public	I Private	II	III	Va	I, II, III, & Va	M	B	I, II, III, Va, M, & B	IV
Female full-time faculty <i>(Standard error)</i>	271	151	547	649	55	1672 <i>(13)</i>	1439 <i>(31)</i>	3341 <i>(151)</i>	6453 <i>(153)</i>	553 <i>(15)</i>
Doctoral full-time faculty	231	150	385	416	49	1230	942	2192	4364	504
Tenured	85	43	158	200	18	504	587	1342	2432	184
Untenured, tenure-track	40	19	81	131	6	278	287	670	1235	162
Postdoctoral appointments	58	55	58	11	13	195	3	40	238	42
Other non-tenure-track	48	32	88	74	12	254	65	140	458	117
Nondoctoral full-time faculty	40	1	162	234	6	442	497	1149	2089	48
Female part-time faculty	61	3	150	229	4	447	793	1558	2797	58

Table 1C: Full-Time Faculty, Fall 2009

	GROUP								
	I Public	I Private	II	III	Va	M	B	IV	TOTAL
Full-time faculty <i>Percentage of total full-time faculty</i>	1802 <i>7%</i>	1078 <i>4%</i>	2553 <i>11%</i>	2519 <i>10%</i>	308 <i>1%</i>	4328 <i>18%</i>	9875 <i>41%</i>	1824 <i>8%</i>	24287 <i>100%</i>
Female full-time faculty <i>Percentage of total female full-time faculty</i>	271 <i>4%</i>	151 <i>2%</i>	547 <i>8%</i>	649 <i>9%</i>	55 <i>1%</i>	1439 <i>21%</i>	3341 <i>48%</i>	553 <i>8%</i>	7006 <i>100%</i>
<i>As percent of female full-time faculty within group</i>	<i>15%</i>	<i>14%</i>	<i>21%</i>	<i>26%</i>	<i>18%</i>	<i>33%</i>	<i>34%</i>	<i>30%</i>	<i>29%</i>

Table 1D: Mathematics Faculty Counts and Percentage Female, Fall 2002-2009

	2002	2003	2004	2005	2006	2007	2008	2009
Groups I, II, III, & Va								
Doctoral full-time faculty								
Tenured/tenure-track	5616	5559	5604	5686	5668	5709	5666	5834
<i>Percentage female</i>	<i>10%</i>	<i>10%</i>	<i>11%</i>	<i>11%</i>	<i>12%</i>	<i>12%</i>	<i>13%</i>	<i>13%</i>
Non-tenure-track	1274	1343	1314	1401	1461	1576	1598	1681
<i>Percentage female</i>	<i>23%</i>	<i>25%</i>	<i>25%</i>	<i>24%</i>	<i>25%</i>	<i>25%</i>	<i>25%</i>	<i>27%</i>
Part-time faculty	1504	1389	1355	1054	1128	1143	1165	1154
<i>Percentage female</i>	<i>35%</i>	<i>35%</i>	<i>37%</i>	<i>37%</i>	<i>40%</i>	<i>37%</i>	<i>37%</i>	<i>39%</i>
Group M								
Doctoral full-time faculty								
Tenured/tenure-track	3188	3005	3113	3351	3400	3325	3403	3208
<i>Percentage female</i>	<i>22%</i>	<i>22%</i>	<i>23%</i>	<i>24%</i>	<i>25%</i>	<i>25%</i>	<i>26%</i>	<i>27%</i>
Non-tenure-track	276	230	277	263	283	232	231	220
<i>Percentage female</i>	<i>39%</i>	<i>33%</i>	<i>48%</i>	<i>36%</i>	<i>28%</i>	<i>38%</i>	<i>32%</i>	<i>31%</i>
Part-time faculty	2393	1952	1888	1842	1493	1868	1824	1802
<i>Percentage female</i>	<i>37%</i>	<i>37%</i>	<i>37%</i>	<i>37%</i>	<i>41%</i>	<i>39%</i>	<i>42%</i>	<i>44%</i>
Group B								
Doctoral full-time faculty								
Tenured/tenure-track	5569	6172	5770	6875	6623	6427	6733	6914
<i>Percentage female</i>	<i>23%</i>	<i>26%</i>	<i>25%</i>	<i>25%</i>	<i>27%</i>	<i>27%</i>	<i>25%</i>	<i>29%</i>
Non-tenure-track	507	460	472	516	545	363	532	636
<i>Percentage female</i>	<i>36%</i>	<i>20%</i>	<i>29%</i>	<i>32%</i>	<i>25%</i>	<i>33%</i>	<i>26%</i>	<i>28%</i>
Part-time faculty	4117	3997	4846	3630	3922	4053	3703	3614
<i>Percentage female</i>	<i>45%</i>	<i>42%</i>	<i>44%</i>	<i>41%</i>	<i>40%</i>	<i>43%</i>	<i>46%</i>	<i>43%</i>

faculty in Groups I, II, III, Va, M, and B combined is 22,463 of which 6,453 are females. Females comprise 29% of the full-time faculty, about the same as last year's 28%. In Group B the estimated number of doctoral female faculty increased from 1,825 last year to 2,192 this year, tenured female faculty increased from 1,137 to 1,342, untenured but tenure-track female faculty increased from 552 to 670, and non-tenure-track doctoral female faculty (including postdoctoral appointments) increased from 136 to 180. In Group M the doctoral full-time female faculty decreased from 961 last year to 942, and untenured but tenure-track female faculty decreased from 311 to 287 this year. These declines are due primarily to the shift of the eight former Group M departments to Group III for the 2009 survey.

Table 1C compares the number of full-time and female full-time faculty that fall into each reporting group for fall 2009. The percentage who are female in each group is given in the bottom row of Table 1C. These percentages vary considerably among the groups, from a low of 14% for Group I (Pr) to a high of 34% for Group B.

Table 1D contains information about the percentage of female faculty among the tenured/tenure-track and non-tenure-track doctoral full-time faculty and among the part-time faculty for the years 2002 to 2009. Table 1D shows a small increase in the percent of women among the tenured/tenure-track faculty within the doctoral departments and more substantial increases in Group M and Group B departments.

Table 1E gives the male/female breakdown by count and percentage for Groups I, II, III, and Va combined, Groups M and B combined, and Group IV for various categories of faculty. It shows that the percentage of women is generally higher in statistics (Group IV) than in the doctoral mathematics groups (Groups I, II, III, and Va combined) and that the percentage of tenured faculty who are women is highest in Groups M and B combined.

Table 1E: Summary of Full-Time and Part-Time Faculty, Fall 2009

	GROUP					
	I, II, III, & Va		M & B		IV	
	Male	Female	Male	Female	Male	Female
Full-time faculty	6588	1672	9422	4780	1272	553
<i>Percentage</i>	80%	20%	66%	34%	70%	30%
Doctoral full-time faculty	6285	1230	7844	3134	1220	504
<i>Percentage</i>	84%	16%	71%	29%	71%	29%
Tenured	4276	504	5551	1929	727	184
<i>Percentage</i>	89%	11%	74%	26%	80%	20%
Untenured, tenure-track	777	278	1685	958	254	162
<i>Percentage</i>	74%	26%	64%	36%	61%	39%
Postdoctoral appointments	796	195	34	43	81	42
<i>Percentage</i>	80%	20%	44%	56%	66%	34%
Other non-tenure-track	437	254	574	205	158	117
<i>Percentage</i>	63%	37%	74%	26%	58%	42%
Nondoctoral full-time faculty	302	442	1579	1646	52	48
<i>Percentage</i>	41%	59%	49%	51%	52%	48%
Part-time faculty	707	447	3066	2350	140	58
<i>Percentage</i>	61%	39%	57%	43%	71%	29%

Table 1F: Nondoctoral Full-Time Faculty, Fall 2009

Full-time Faculty	GROUP							
	I, II, III, & Va		M		B		IV	
	Male	Female	Male	Female	Male	Female	Male	Female
Without a Doctorate	302	442	402	497	1176	1149	52	48
Tenured	12	15	58	32	422	260	2	1
Untenured, tenure-track	2	0	8	17	123	76	1	0
Postdoctoral appointments	3	2	0	0	0	0	6	1
Other non-tenure-track	284	426	336	448	631	813	43	46

Table 1G: Part-Time Faculty, Fall 2009

Part-time Faculty	GROUP							
	I, II, III, & Va		M		B		IV	
	Male	Female	Male	Female	Male	Female	Male	Female
Doctoral	278	85	235	95	421	235	118	37
Nondoctoral	429	362	775	697	1636	1322	22	21
Total	707	447	1010	793	2057	1558	140	58

Table 1F shows that of the 3,968 nondoctoral full-time faculty in Groups I, II, III, Va, M, and B combined, 2,089 (53%) are females. From Table 1G we see that in these same groups there are 6,570 part-time faculty, of which 2,797 (43%) are females.

Faculty Recruitment

Figure 1 shows the number of full-time doctoral positions posted for all mathematics departments combined as well as the number of those that were tenured/tenure-track for the years 1997 to 2009. The number of positions posted and the number of available tenured/tenure-track positions steadily

Table 2A: Recruitment of Faculty with a Doctorate, Fall 2009

	GROUP									
	I Public	I Private	II	III	Va	I, II, III, & Va	M	B	I, II, III, Va, M, & B	IV
Posted Doctoral Positions										
Total number¹	139	100	150	129	17	535	173	756	1464	140
<i>(Standard error)</i>						14	15	83	84	7
Tenured/tenure-track	75	25	57	98	11	267	142	521	930	84
Open to new doctoral recipients	80	85	139	102	15	421	162	715	1297	112
Tenured/tenure-track	19	14	45	75	9	161	127	495	783	64
Open at assoc/full level	21	9	8	19	2	60	25	29	114	38
Reported Hires for Above										
Total number	114	93	133	108	10	458	151	665	1274	113
Male doctoral hires	89	68	106	76	8	347	95	424	866	80
Tenured/tenure-track	33	13	31	58	3	138	75	270	483	41
Female doctoral hires	25	25	26	28	2	107	45	221	373	31
Tenured/tenure-track	15	3	8	21	1	49	35	143	227	15
Male temporary hires	0	0	0	1	0	1	2	13	16	3
Female temporary hires	0	0	0	3	0	3	10	7	19	0
Total new doctoral hires	51	68	85	36	6	245	58	352	656	55
Male new doctoral hires	45	51	64	27	5	191	31	217	439	39
Tenured/tenure-track	0	1	6	15	0	22	26	149	197	17
Female new doctoral hires	6	17	21	9	1	54	28	135	216	15
Tenured/tenure-track	0	0	3	3	0	6	22	77	105	4
Unfilled positions	25	7	17	17	7	73	22	91	186	27

increased, reaching a maximum in 2001. Over the last eight years these numbers have shown some variability with this year's total number of tenured/tenure-track posted positions being the lowest reported since 1997.

Figure 1A shows the number of full-time doctoral positions filled for all mathematics departments combined as well as the number of tenured/tenure-track positions filled for the years 2002 to 2009. After having reached a seven-year high last year the number of tenured/tenure-track positions plunged to an eight-year low for 2009 (dropping to 711 from 978 last year).

Table 2A contains detailed information on the number of full-time doctoral faculty positions under recruitment during 2008-2009 for employment beginning in the academic year 2009-2010. Among mathematics departments (Groups I, II, III, Va, M, and B), 1,464 positions were under recruitment, down 27% compared to those under recruitment during 2007-2008. Of those 1,464 positions, 1,297 (89%) were available to new doctoral recipients, and of those 1,297 positions, 783 (60%) were tenured/tenure-track positions. The 783 tenured/tenure-track positions open to new doctoral recipients is down 28% from the 1,081 such positions under recruitment in 2007-2008, reflecting decreases in all Groups except Group I (Pr) which increased from 9 to 14 this year. The total number of tenured/tenure-track full-time doctoral positions under recruitment in Groups I, II, III, Va, M, and B combined is 930, down 23% from last year's figure of 1,213. In Groups I, II, III, and Va combined, the total number of posted doctoral positions

Table 2B: A Summary of Recruitment of Faculty with a Doctorate, Fall 2009

	GROUP		
	I, II, III, & Va	M & B	IV
Posted Doctoral Positions			
Total number	535	929	140
Tenured/tenure-track	267	663	84
Open to new doctoral recipients	421	876	112
Tenured/tenure-track	161	622	64
Reported Hires for Above, excluding temporary hires			
Total doctoral hires	454	785	111
Tenured/tenure-track	187	524	56
Previously in non-tenure-track	95	170	14
Previously in postdoc	61	36	6
Total new doctoral hires¹	245	410	55
Tenured/tenure-track	28	273	21
Male	191	248	39
Tenured/tenure-track	22	174	17
Female	54	162	15
Tenured/tenure-track	6	99	4
Total not-new doctoral hires	209	375	56
Tenured/tenure-track	158	251	35
Male	156	271	41
Tenured/tenure-track	116	171	24
Female	53	104	15
Tenured/tenure-track	43	80	11

¹ New doctoral hires are individuals who have held a doctorate for less than one year at the time of hiring.

Figure 1: Number of Full-Time Doctoral Positions under Recruitment
Groups I, II, III, Va, M, & B Combined, Fall 1997 to Fall 2009

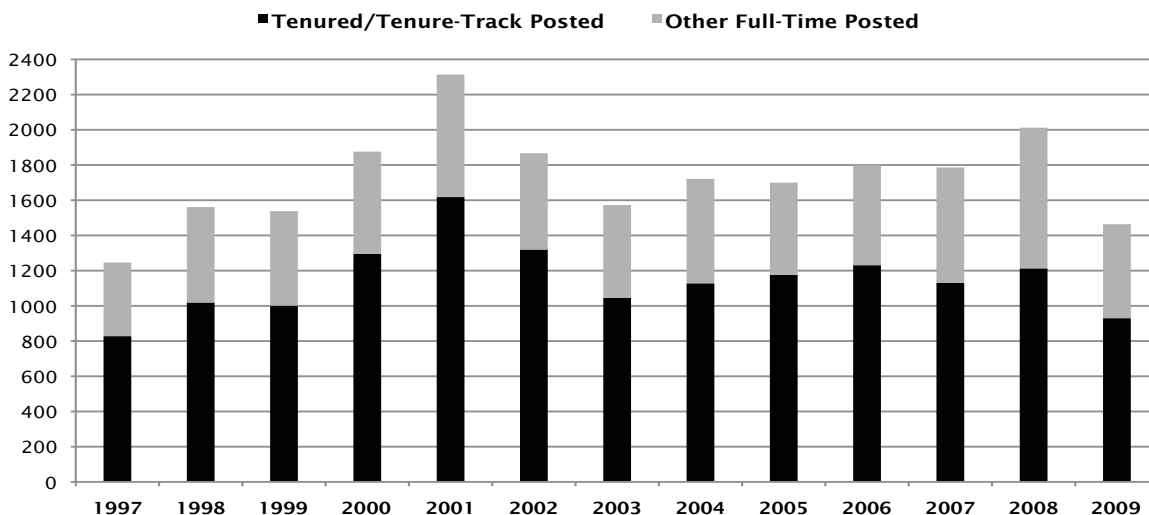
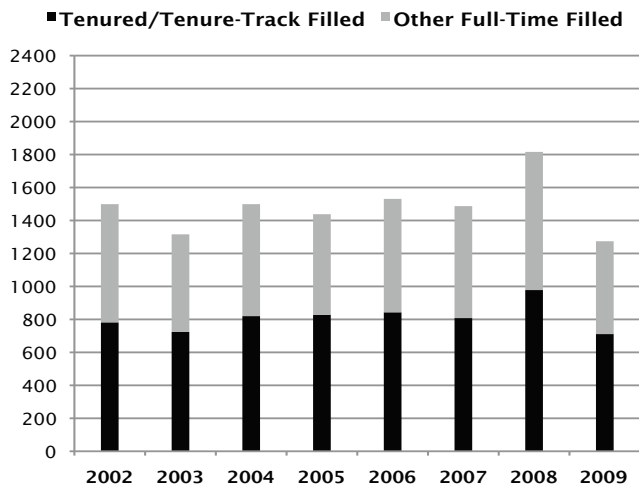


Figure 1A: Number of Full-Time Doctoral Positions Filled

Groups I, II, III, Va, M, & B Combined, Fall 2002 to Fall 2009



187 (41%) were tenured/tenure-track positions. Last year these same groups filled 635 doctoral positions, of which 253 (40%) were tenured/tenure-track. Groups M and B combined filled 785 doctoral positions this year, and 524 (67%) of these were tenured/tenure-track positions. Last year these two groups filled 1,053 doctoral positions, of which 725 (69%) were tenured/tenure-track.

This year the estimated total number of new doctoral hires in mathematics departments is down 13% (to 656 from 758) from last year; it is down 13% (to 245 from 280) in Groups I, II, III, and Va combined, and down 14% (to 410 from 478) in Groups M and B combined. The number of new doctoral tenure-track hires in the mathematics groups combined is down 20% (to 301 from 378). Among the new doctoral hires in Groups I, II, III, and Va combined, only about 12% of the jobs (12% for males, 11% for females) were tenure-track positions. This is down from 21% last year.

Departments were asked to report the number of doctoral hires into tenured/tenure-track positions

open at the associate/full level decreased from 96 last year to 60 this year.

Table 2B condenses the information in Table 2A. It also reorganizes the doctoral hires into one section for new doctoral hires and another for other doctoral hires (so excludes posted doctoral positions that were temporarily filled with a person without a doctorate).

From Table 2B we find that the total number of full-time doctoral positions filled in mathematics departments (Groups I, II, III, Va, M, and B combined) is 1,239, down from 1,688 last year (a decrease of 27%); it is down 29% in Groups I, II, III, and Va combined and down 25% in Groups M and B combined. This year Groups I, II, III, and Va combined filled 454 doctoral positions, of which

Table 2C: Positions Posted and Filled, Fall 2009

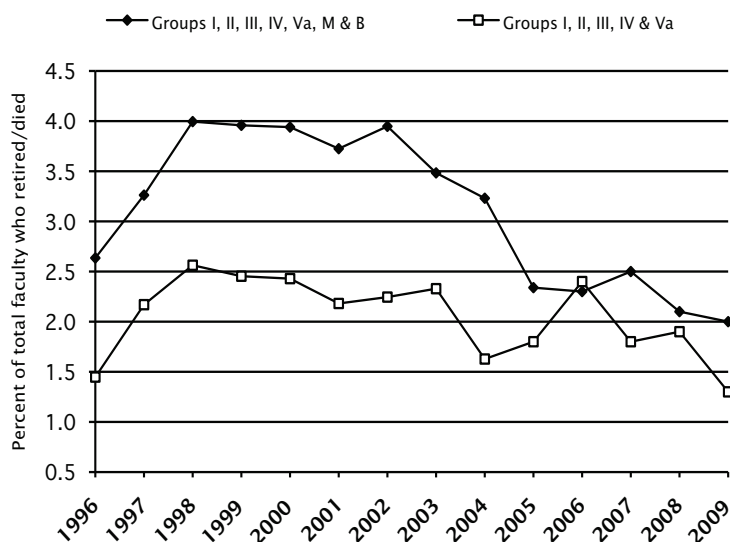
Positions	GROUP		
	I, II, III, & Va	M & B	IV
Posted positions opened to new doctoral recipients	421	876	112
% tenured/tenure-track	38%	71%	58%
Positions filled by new doctoral recipients	245	410	55
% tenured/tenure-track	12%	67%	38%
Positions filled by not-new doctoral recipients ¹	209	375	56
% tenured/tenure-track	76%	67%	63%

¹ Not-new doctoral recipients are individuals who have held their doctorate for more than one year.

Table 3: Faculty Deaths & Retirements,¹ Fall 2009

	GROUP									
	I Public	I Private	II	III	Va	I, II, III, & Va	M	B	I, II, III, Va, M, & B	IV
Full-time faculty who retired or died										
Total number (Standard error)	31	8	34	40	6	118 (6)	105 (11)	249 (41)	472 (43)	13 (2)
Percentage	1.7%	0.7%	1.3%	1.6%	1.9%	1.4%	2.4%	2.5%	2.1%	0.7%

¹ Number and percentage of full-time faculty who were in the department in fall 2007 but were reported to have retired or died by fall 2008.

Figure 2: Faculty Retired/Died

filled by individuals who held a non-tenure-track position the previous year and of those, how many were in postdoctoral appointments. For Groups I, II, III, and Va combined, 95 individuals reported having held a non-tenure-track position the previous year (51% of the 187 tenure-track hires), with 61 (33%) having held a postdoctoral appointment the previous year. This compares with last year's figure of 86 (34%) positions filled by individuals who held a postdoctoral appointment the previous year. For Groups M and B combined, 170 individuals (32% of the 524 tenure-track hires) reported having held a non-tenure-track position the previous year, with 36 (7%) having held a postdoctoral appointment the previous year. This compares with last year's figure of 45 (6%) positions filled by individuals who held a postdoctoral appointment the previous year.

The estimated number of not-new doctoral hires in mathematics departments is 584, down from 930 last year. The total of not-new doctoral hires (one-plus years since degree) into tenured/tenure-track positions in all the mathematics groups

combined is 409, down 41% from last year. It is down 19% in Groups I, II, III, and Va combined (to 158 from 195 last year), and down 50% in Groups M and B combined (to 251 from 499).

Faculty Attrition

Table 3 displays losses of full-time mathematical sciences faculty due to retirements and deaths between 1 September 2008 and 31 August 2009 for each departmental grouping. The fall 2009 faculty attrition rate for Groups I, II, III, Va, M, and B combined is 2.1%, and it is 0.7% for Group IV. For fall 2009, Group I (Pr) had the lowest attrition rate at 0.7%, while Group B had the highest at 2.5%.

Figure 2 shows the trends in these attrition rates between 1996 and 2009. While the rates vary from group to group and from year to year within each group, for most of the 1990s the dominant trend was one of increasing attrition for all groups combined. In the late 1990s attrition leveled off, then began dropping in 2003, reaching the smallest rate of attrition this year.